

ABSTRACT OF THE DISCLOSURE

As a power-supply voltage VCC is applied to a second terminal ,
a latch is reset by a reset signal POR from a power-on reset
unit. Subsequently, as the voltage of a signal IN applied to
5 a first terminal is increased to higher than the voltage VCC
by a threshold voltage V_{th} of a PMOS 11, the PMOS 11 turns on,
causing a node N1 to become "H." Thus, a test mode is set in
the latch. Subsequently, even if the signal IN is reduced to
VCC or lower, the test mode is maintained. A high-voltage test
10 can be conducted by increasing the power-supply voltage at the
second terminal, thereby eliminating the need for applying the
first terminal with a higher voltage than required to set the
test mode. It is therefore possible to prevent a gate oxide film
of a buffer from being destroyed.